

## 1.0 EXECUTIVE SUMMARY

This report details the December 2017 workover conducted to replace the injection tubing and post-workover mechanical integrity testing (MIT) performed on WDW-169 at the TM Deer Park Services Limited Partnership (TMDP) facility at Deer Park. The workover and post-workover MIT were conducted in accordance with the requirements and guidelines of the Texas Commission on Environmental Quality (TCEQ) under Title 30, Chapter 331 of the Texas Administrative Code (30 TAC §331), as well as specific permit conditions for WDW-169. Workover and post-workover testing activities were performed during the period of December 3 - 11, 2017.

The workover rig and associated equipment were provided by Pioneer Well Services (Pioneer). Casing Crew services for removing the existing 4 ½-inch injection tubing, and running the new replacement 4 ½-inch injection tubing, and on-site pipe inspection services were provided by Torque Right, LLC. Wireline services were provided by Coastal Wireline Services, Inc. (CWS) and by Superior Energy Services (SES). Other rental equipment was provided by Weatherford US. The replacement 4 ½-inch Bluebox 2500 fiberglass injection tubing was provided by Future Pipe Industries (FPI). The re-dress of the Model 12 packer latch-in seal assembly and the test plug were provided by Delta P, Inc.

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The TMDP operations site representatives were Mr. Frank Harris and Mr. Kirk Edwards. The TMDP environmental affairs representative was Ms. Christina Perez. Site activities were supervised and coordinated by Mr. Gary P. Rogers of Strata Technologies, LLC (Strata). The certification of workover and testing activities is included in Appendix A. A chronological summary of activities is included in Appendix B. TCEQ correspondence is included in Appendix C. All depths in this report are referenced to the Kelly bushing (KB) elevation, which is 13 feet above ground level for WDW-169.

The workover on WDW-169 was performed as preventative maintenance activity to replace the existing injection tubing, which had been in service since 2012. The existing

injection tubing and packer seal assembly were pulled and a 40-arm caliper casing inspection log was run from the packer to surface. In addition, a packer test plug was run on wireline and the packer and 7 5/8-inch longstring casing were successfully pressure tested.

A post-workover annulus pressure test (APT) was performed after the new 4 1/2-inch fiberglass injection tubing and re-dressed Delta P seal assembly had been run, and the wellhead had been re-installed. Results of the post-workover APT, which demonstrated mechanical integrity, were transmitted to the TCEQ who granted approval to resume injection activities on December 11, 2017.